



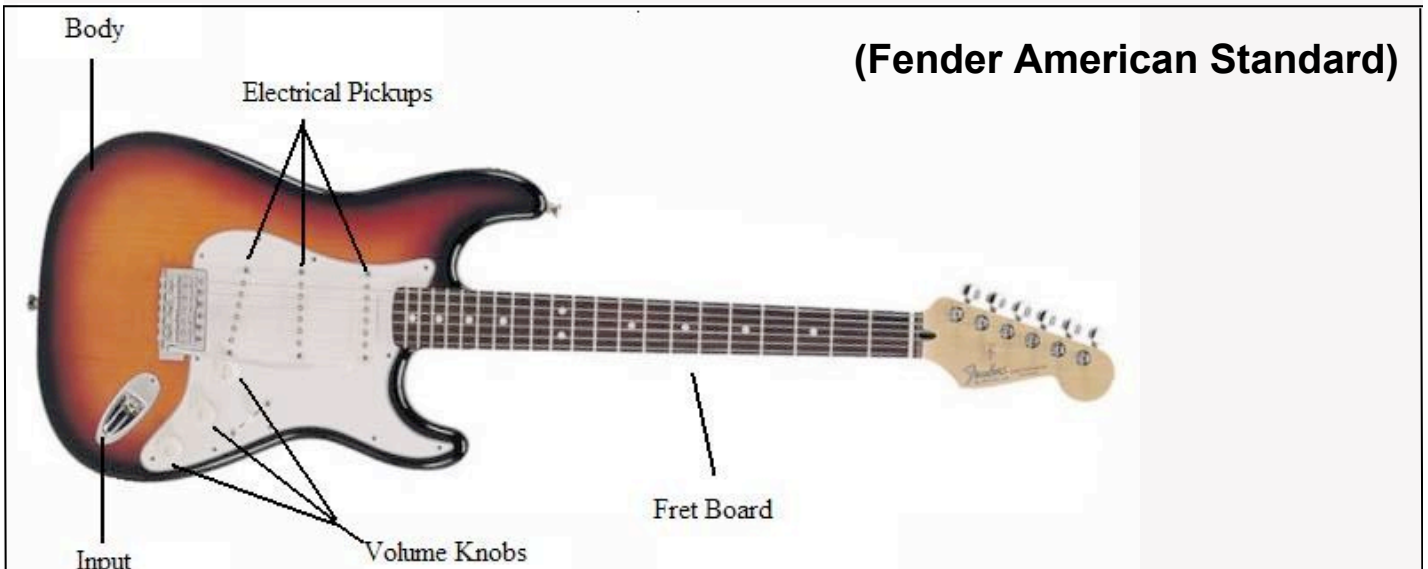
Understanding the Basics of Setting up Equipment for the Electric Guitar

The electric guitar is a unique instrument that is primarily known for its versatile tones and signature sounds. Many people pick up this instrument for the first time every day in hopes of achieving virtuosity on par with their musical idols. But few people start off in the right direction when it comes to setting up their new equipment for their guitar. These instructions are meant for beginner guitarists who know nothing about guitar equipment but are eager to gain control of the electric signal of their guitar so that they can progress towards achieving their own unique tone.

Guitars and equipment are very expensive, so it is understandable if you do not have all of the equipment discussed in these instructions.

WARNING: Always turn knobs on equipment at a slow pace. Abrupt sound and volume changes can cause irreparable hearing damage.

These instructions will cover the names of equipment the average guitarist possesses, information on how the electric guitar works in collaboration with the equipment, and how the equipment should be set up.



Know a Little About the Power in Your Hands

Acoustic guitars and electric guitars have totally different tones. Both instruments rely on the sound generated from the vibration of the string caused by someone plucking it. The different sounds, known as notes, are played by the musician holding the string down at different spots on the fret board, the plank of wood jutting out from the body of the guitar (Refer to Figure 1).

For acoustic guitars, the sound is amplified due to the hollow body of the guitar. Most electric guitars are not hollow-bodied though, so how does the sound get amplified? Electric guitars use devices made of magnets and coils of copper wire known as pickups to capture the string vibration. The pickups, shown in Figure 1, convert the vibration into an electric signal, which is then processed through the different effects and played through the guitar amplifier.



Equipment and Supplies

- **Electric guitar:** the instrument that will give off the electric signal (See Figure 1 above).
- **Amplifier:** The speaker through which the guitar's electric signal is changed back to an actual sound and played at a specified volume.
- **Guitar effects pedals:** Special devices that alter the sound of the electric guitar when the electric signal runs through them. They are turned on when they are pressed on by the musician's foot. Some of the most common types of guitar effects pedals are distortion pedals, wah-wah pedals, and delay pedals. Distortion pedals make the guitar sound crunchy, muddled, and obviously electric. Wah-wah pedals, made famous through the Funk genre and guitar solos, make the guitar wail and sound like the notes are stretching out. Delay pedals can do various things, such as repeat the sound of a note a specified number of times, reverse the electric signal so that the sound plays backwards, and sustain notes for an incredibly long time.
- **Guitar cables:** the long cords used to plug in to the Input of the electric guitar and the input of either a guitar effects pedal or an amplifier (See Figure 2).

- **Mini guitar cables:** Small versions of guitar cables, used to connect the guitar effects pedals to one another.
- **Power Adaptor:** Source of electric energy that gives power to the guitar effects pedals once plugged in.
- **Daisy Chain:** a cable that splits the electric current down numerous off-shooting cables so that each pedal can get the same amount of voltage and be powered up without the need for another power adaptor (See Figure 3).



Figure 2 (MegaDeals)



Figure 3 (Power-all)

Hooking Yourself Up With Sound

Now, for the actual process of setting up the equipment! Do not fret over the fancy names introduced to you in the section before, setting up guitar equipment is like riding a bike. Once you go through the motions of learning it once, you always know it. For the actual instructions of this article, we will be assuming you have an electric guitar, an amplifier, one of each of the guitar effects pedals discussed above, two guitar cables, 2 mini guitar cables, one power adaptor, and one daisy chain. We will now walk through the process!

The Details

1. **Organize:** Take all of your equipment out of their boxes and wrappers, and separate them into groups of cables and pedals. Plug the amplifier and power adaptor into electrical sockets.
2. **Plugging In:** Take one of the guitar cables and plug it into the Input of the electric guitar (See Figure 1). Plug the other end of the guitar cable into the hole of the Wah-wah pedal that is labeled "In." Plug one of the mini guitar cables into the hole of the Wah-wah pedal labeled "Out." Plug the other end of the mini guitar cable into the "In" hole of your distortion pedal. Take the last mini guitar cable and plug it in between the "Out" hole of your distortion pedal and the "In" hole of your delay pedal. Finally, take the last guitar cable and plug one end of it into the "Out" hole of your delay pedal and the "Input" hole on your amplifier. It is imperative that you follow the order of Wah-wah pedal, distortion, then delay pedal, because in any other order the electric signal gets processed in detrimental ways, resulting in an unpredictable, uncontrollable sound from your guitar.
3. **Power on:** Now that you have set up the effects pedals and most of the cables so that the electric signal can run through them, it is time to give the pedals the electricity they need. Take your daisy chain and connect the only different looking cable off-shoot to the power adaptor. Make sure the voltage level of your power adaptor matches the voltage levels of each of your pedals. The power adaptor and effects pedals usually both have the required voltage levels written directly on top of the pedal in plain view. Connecting a power adaptor that is too weak for a pedal results in fading low sound.

4. **Connecting Loose Ends:** Connect each of the guitar effects pedals to an off-shoot of the daisy chain. The holes on the effects pedals are generally found at the top, above the knobs.
 5. **Checking:** Flip on the power switch on the amplifier and pluck a string of the guitar. A clean tone should come out because none of the pedals are on. Check each of the pedal's knobs that have titles such as "Volume," "Tone," and "Distortion." Make sure none of these knobs are turned to the maximum level; otherwise you could destroy your amplifier due to extreme imbalance of proportions of the different facets of sounds. Once these knobs are all at a low level, turn on one then try it out, turn it off, then try the next one.
 6. **Get the Correct Sound:** Now that the electric signal is being processed correctly and all of the devices are functioning, you should take a look at the instruction manuals for each of the pedals and tweak their knobs according to the sound you want or the genre of music you want to play. Congratulations, now that the tedious part of setting up is out of the way, it is time to rock out!
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